WHAT IS CLAIMED IS:

1. An ellipsometer for aligning incident angle, wherein the ellipsometer comprising:

a main frame shaping half circle and flat surface on which a plurality of grooves are radial and circumferential directionally carved;

a specimen stage, which is installed at the groove-caved surface of the main frame, for tilting a specimen on a upper surface of the specimen stage with respect to horizontal direction and translating the specimen upward and downward;

a polarizing unit, which is capable of fixing and moving on the groove-carved surface of the main frame, for polarizing a light from a light source and outputting the polarized light to the specimen, and moving on the groove-carved surface; and

a light detecting unit, which is capable of fixing and moving on the groove-carved surface, for a reflection light from the specimen.

2. The ellipsometer according to claim 1, wherein the grooves comprising:

a circumferential direction groove is carved within a predetermined radius less than that of the main frame and is formed like a v-shape; and

a plurality of radial direction grooves are symmetrically carved with respect to a vertical axis of the main frame and are formed like a v-shape.

3. The ellipsometer according to claim 1, wherein the polarizing unit comprising:

a polarizer for polarizing a polarizing state of the light from a light source; and

a modulator for modulating the polarizing light and outputting the modulated light to the specimen.

4. The ellipsometer according to claim 1, wherein the polarizing unit comprising:

a plurality of balls for accurately moving the polarizing unit on the grooves; and

a permanent magnet, which is bonded under the surface of the polarizing unit facing the groove-carved surface of the main frame, for fixing the polarizing unit to the groove-carved surface of the main frame.

5. The ellipsometer according to claim 4, wherein the balls are arranged on the radial direction groove and the circumferential direction.

6. The ellipsometer according to claim 4, wherein the light detecting unit comprising:

an analyzer for detecting the polarizing state of the reflection light from the specimen; and

a photo detector for converting the analyzed light from the analyzer into an electrical signal.

7. The ellipsometer according to claim 4, wherein the light detecting unit comprising:

a plurality of balls for accurately moving the light detecting unit on the groove-carved surface of the main frame; and

a permanent magnet, which is bonded under the surface of the light detecting unit facing the groove-carved surface of the main frame, for fixing the light detecting unit to the groove-carved surface of the main frame. .

8. The ellipsometer according to claim 1, wherein the light detecting unit comprising:

an analyzer for detecting the polarizing state of the reflection light from the specimen; and

a photo detector for converting the analyzed light from the analyzer into an electrical signal.

9. The ellipsometer according to claim 1, wherein the light detecting unit comprising:

a plurality of balls for accurately moving the light detecting unit on the groove-carved surface of the main frame; and

a permanent magnet, which is bonded under the surface of the light detecting unit facing the groove-carved surface of the main frame, for fixing the light detecting unit to the groove-carved surface of the main frame.

10. The ellipsometer according to claim 9, wherein the balls are arranged on the radial direction groove and the circumferential direction groove.

11. A precision auto-alignment method for incident angle of an ellipsometer, wherein the precision auto-alignment method comprising the steps of:

measuring tilt and translating angle errors according to incident angles of a

polarizing unit;

compensating each error by moving a light spot reflecting from the specimen onto a center of the detector's entrance aperture;

calculating the tilt and translating angle errors from repeatedly performing the measuring and compensating steps above; and

correctly aligning incident angle for the ellipsometer by the tilt and translating angle errors.

12. The precision auto-alignment method according to claim 11, wherein the measuring step comprising:

a first measuring a first set of the tilt and translating errors as the light spot is centered on the detector's entrance aperture when the polarizing unit and analyzing are set at a first incident angle; and

a second measuring a second set of the tilt and translating errors as the light spot is centered on the detector's entrance aperture when the polarizing unit and analyzing are set at a second incident angle.

13. The precision auto-alignment method according to claim 11, wherein the compensating step comprising:

a step of accessing the light spot to a entrance aperture of detecting unit of the ellipsometer by tilting a specimen on specimen stage of the ellipsometer; and

a step of centering the light spot to a entrance aperture of detecting unit by obtaining a half maximum intensity and at the same time a half position between two positions have the same intensity.

14. The precision auto-alignment method according to claim 13, wherein the centering step comprising:

a step of obtaining a first center position in a X-direction at a first half intensity of the first maximum intensity of between two x positions which have a first intensity; and

a step of obtaining a second center position in a Y-direction at a second half intensity of the second maximum intensity between two y positions which have a second intensity.